

PART ONE: FOUNDATION FOR THE PLAN

BACKGROUND AND INTRODUCTION

Acadia National Park includes 2,366 acres on the Schoodic Peninsula, approximately 45 miles by road from Bar Harbor, Maine, but only five miles by water across Frenchman Bay. Added to Acadia in 1929, the Schoodic District receives far fewer visitors than Mount Desert Island and, as a result, offers opportunities for quiet enjoyment. Visitor amenities include a 6-mile scenic drive along the coast, the Frazer Point picnic area, hiking trails, and a gravel road to Schoodic Head, the highest point on the peninsula, which offers panoramic views of the region. Schoodic Point, a popular destination at the southernmost end of the peninsula, draws those who seek to experience the ever-changing waters of the Atlantic Ocean from a rough pink granite shore laced with veins of basalt. The Schoodic District also includes Little Moose, Pond, Rolling, and Schoodic Islands.

Coastal Maine has long been a magnet for important American artists including Thomas Cole, who in his 1836 "Essay on American Scenery" called upon his fellow citizens to "appreciate the treasures of their own country." He sketched and painted Schoodic and inspired others, including Frederic Church and Fitz Hugh Lane, to experience a place as yet undiscovered by tourists. Working artists continued to spend time in the region through the 19th and 20th centuries, providing a fine visual record of its scenery.

Since 1935, the peninsula has also been home to the United States Navy, when a radio station was constructed to replace a similar facility on Mount Desert Island that stood in the way of construction of the Park Loop Road. The navy base, most recently known as Naval Security Group Activity Winter Harbor (NSGA), was located on 100 acres at Schoodic Point that had been part of Acadia National Park. When the navy announced its intention to close the base at Schoodic, the National Park Service (NPS) began planning to receive property that by law would revert back to NPS. The transfer took place on July 1, 2002.

This plan is being prepared while the Schoodic Peninsula is undergoing a great deal of change due to the navy's departure. Much of that change, while directly affecting the park, is being driven by a panoply of local, state, and other interests. The NPS is actively engaged in this ongoing dialogue about the future of Schoodic, and is grateful for the information provided and willingness of community leaders to participate in this planning process.

The base closure also involved 23 acres in Winter Harbor containing 80 units of housing and 451 acres in Corea, part of the town of Gouldsboro, where two operations buildings are surrounded by an important ecological area. These properties have transferred to the Town of Winter Harbor and U.S. Fish and Wildlife Service. Planning for their transition is being done in consultation with NPS, but is not described in this plan.

Plans for the Schoodic District acknowledge the significant loss of jobs and economic activity associated with closing of the navy base and support state and local economic development efforts while ensuring that new uses within the park are consistent with the laws and policies governing Acadia National Park.

PURPOSE AND NEED FOR THE PLAN

The purpose of a general management plan is to provide the National Park Service with a basic foundation for decision making over a period of 10–15 years. A general management plan describes broad goals for the park and the management prescriptions (i.e., desired resource conditions and visitor experiences) that should be achieved and maintained over time. The purpose of the *Draft Schoodic General Management Plan Amendment and Environmental Impact Statement* is to describe the issues identified during the public planning process, and to present alternatives for long-range management actions to address them. The intent of this plan is to uphold the goals of

the 1992 General Management Plan while establishing a research and education center at Schoodic. The document also analyzes the possible environmental impacts associated with implementation. After public review and comment, the National Park Service will adopt a final *General Management Plan Amendment* for the Schoodic District that will amend the 1992 *General Management Plan* now in effect.

Acadia's *General Management Plan* did not anticipate the closure of the Naval Security Group Activity Winter Harbor, nor that there would be legislative direction for a research and education center at Schoodic, so it did not provide guidance for future use of navy buildings and land. With the U.S. Navy's departure, NPS must now decide how to convert this property from military to national park use. An added challenge is that the U.S. Navy provided important services to the park and adjacent communities, including snow plowing of park roads and assistance with fire protection and emergency response. Acadia National Park and the towns must now address these needs while dealing with the loss of a major generator of economic activity for the region.

Acadia's 1992 *General Management Plan* states that NPS will manage the Schoodic District to retain opportunities for low-density recreation, current use levels and parking lot capacities, and the existing naturalness and solitude. In addition, the plan states that NPS will not actively promote the Schoodic District nor add facilities to the area. All of the Schoodic District is zoned as a "Natural Area," which directs NPS to manage the area to conserve and protect natural resources and ecological processes, and provide for their use and enjoyment by the public. Because the navy property was an inholding not owned by NPS, it was not zoned.

The recent addition of the navy base property to Acadia National Park offers many opportunities for resource protection and visitor use. Its historic buildings and other facilities have great potential to support the park's mission; however, they also present management dilemmas for the entire 2,366-acre Schoodic District. While legislative direction calls for a research and education center at Schoodic, details about the scale and operation of the center are appro-

priately left to NPS to determine. The NPS conducted feasibility studies for the center as part of this planning process, and the resultant alternatives are based on operational assumptions developed during those studies as well as on natural and cultural resource information.

The NPS is undertaking a number of initial actions at the former navy base to prepare it for civilian use. Immediate needs being addressed include modifications to facilities for health and safety, providing for limited public use, maintaining buildings and utilities, and managing resources.

Because implementation funding is available now for buildings and site work on the former navy property, this document also serves as a development concept plan. It includes program assumptions about the nature of activities expected, design goals and guidelines, and a conceptual site plan for the initial work expected to take place within the next few years.

SCHOODIC EDUCATION AND RESEARCH CENTER

Acadia National Park has been selected to house a research learning center as part of a nationwide NPS initiative called the "Natural Resource Challenge." Called the Schoodic Education and Research Center (SERC), this will be the primary use for the newly acquired facilities at Schoodic. Basic operational funding for the center is being provided and a range of possible activities is being studied in concert with this planning process. The centers offer on-site facilities for research and education and provide housing for program participants. The centers are also expected to involve collaborations with partners such as universities and research institutes, and to offer public programming for learners of all ages.

Most activities under consideration for SERC will be developed through partnerships with one or more organizations with goals compatible to those of Acadia National Park. Many such partnerships exist now but have been constrained by the lack of facilities for research and education elsewhere in the park.



Figure 1. The historic Rockefeller Building could be a focal point of the Schoodic Education and Research Center.

The former navy base at Schoodic was identified as having the potential to provide the necessary facilities and support functions for an exceptional learning and research community (Figure 1). SERC is common to all the alternatives described in this plan, but its management, scale, and cooperation with partners will vary.

The purpose of SERC is to promote and facilitate education and research that is consistent with the mission of NPS. This plan describes three different scenarios for how SERC might develop. SERC's programs and activities would enhance the purposes and values for which Acadia National Park was established. A more detailed description of SERC under Alternative C is provided in Appendix G.

PARK SETTING

This section gives an overview of the natural and cultural resources of the Schoodic District of Acadia National Park and a brief chronology of its history and development. Also included are descriptions of existing park facilities and of the visitor experience. For more detailed information on those resources that might be affected by the actions proposed in this plan, please see Part Three: Affected Environment.

GEOGRAPHY AND CLIMATE

Acadia National Park is located on the coast of Maine and includes approximately 35,500 acres (Figure 2). Most of the park is located on Mount Desert Island and covers about half of its area. The park also includes about 2,400 acres on the Schoodic Peninsula; 2,700 acres on Isle au Haut; and all or parts of 16 smaller coastal islands (Figure 2). The NPS also manages about 180 conservation easements that protect over 11,000 acres on islands in Knox County, and on islands and the Schoodic Peninsula in Hancock County.

The general management plan amendment and environmental impact statement address the 2,366-acre Schoodic District of Acadia National Park, which is the only portion of the park located on the mainland. The Schoodic District is located entirely within the Town of Winter Harbor on the southern tip of the Schoodic Peninsula. The peninsula lies within the Eastern Coastal Region of the State of Maine, which extends from Mount Desert Island to Canada in a 20-mile-wide band along the Gulf of Maine (McMahon 1990).

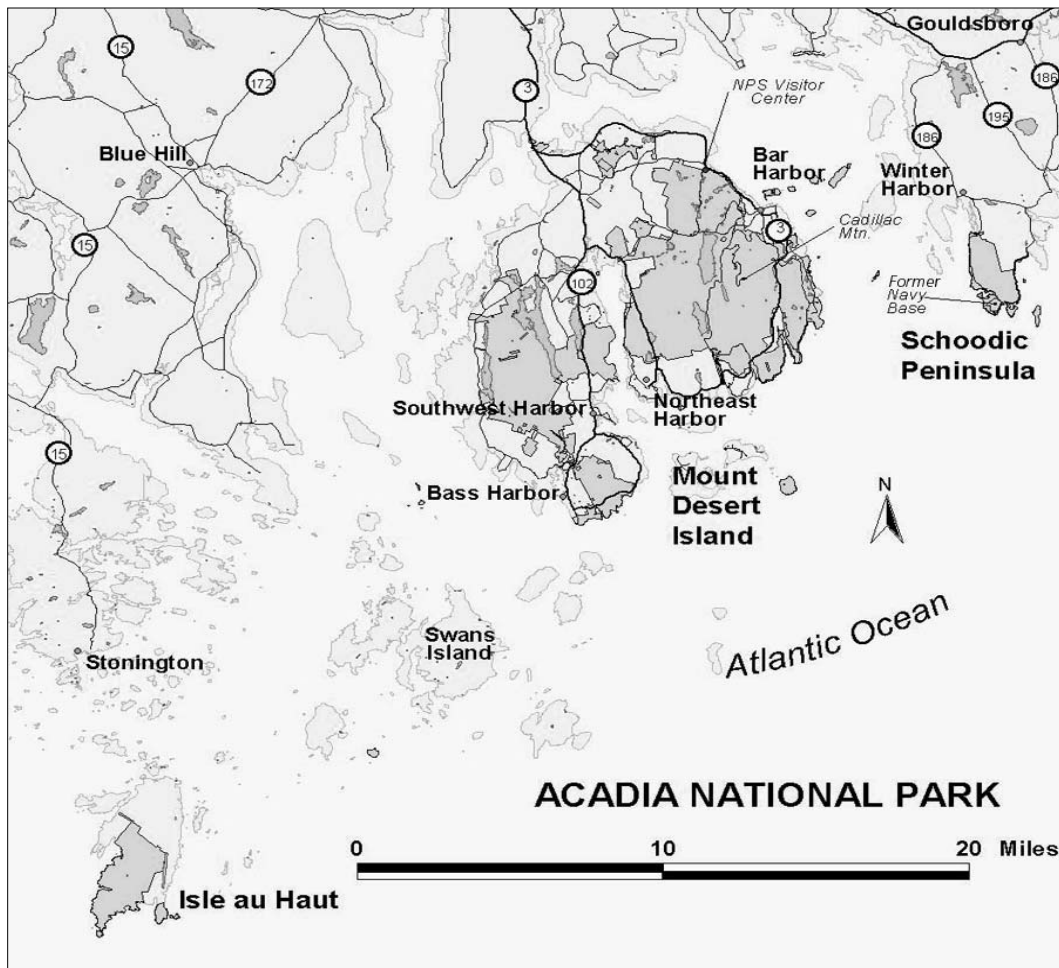


Figure 2. Acadia National Park

The climate of the Eastern Coastal Region is strongly moderated by the Gulf of Maine. Winter temperatures are warmer relative to those a few miles inland and summer temperatures are relatively cooler. The area is often shrouded in fog brought by onshore winds, which help keep humidity comparatively high. The range of temperature extremes is narrower than in inland Maine, and the frost-free season is longer with less snowfall overall. The mean annual temperature at Acadia National Park for 1940–1980 was 46°F (8°C) (Kahl et al. 2000). Annual precipitation for the same period averaged about 48 inches and ranged from 39 to 73 inches. In summer, the area experiences convective storms with intense rainfall of short duration. During the rest of the year, the area experiences broad frontal systems of less intense, longer-lasting rainfall (Kahl et al. 2000).

NATURAL RESOURCES

Geology and Topography

The Schoodic Peninsula is a product of geological upheavals, glacial scouring, and inundation by the sea. The bedrock of the Schoodic Peninsula and most of the surrounding islands consists of fine-grained pinkish granite. Huge fractures have occurred in the granite along the shoreline, creating gigantic slabs and blocks. Within some of these fractures are black basalt dikes, which are the product of intrusive, solidified magma. Measuring up to 25 feet thick, these dikes are very prominent at Schoodic Point. Wave action has eroded the relatively softer basalt in many spots, resulting in deep, narrow chasms and sea cliffs. This wave action has also rounded block-like fragments into cobbles at pocket beaches on the peninsula's eastern shoreline.

The topography of the peninsula is varied and rugged. The highest point on the peninsula is



Figure 3. Schoodic Peninsula and surrounding islands

Schoodic Head, at an elevation of 440 feet (134 m). Another prominent feature is The Anvil, which is located in the southeast portion of the peninsula near Blueberry Hill. The most recent period of glaciation was 18,000 years ago and contributed to the sheer cliffs at Schoodic by plucking off granite blocks as they advanced. Glaciers also modified ridges through scouring to form hills sloping more gently to the north and northwest and more steeply to the south and southeast, as seen on Schoodic Head.

The effect of the area's geologic history is a diverse landscape complete with many small bogs and wetlands, upland forests, ridges, and rugged coast that offers a variety of habitats to intertidal plants and animals. There are several intermittent streams that flow west from the peninsula's interior to feed the wetlands and ponds. The largest of these is Frazer Creek, which drains to the northwest into Mosquito Harbor at Frazer Point (See Figure 4).

The Schoodic District includes four islands in addition to the mainland area (Figure 3). Little Moose Island is 54 acres (22 ha) and lies on the southeastern tip of the peninsula. Pond Island is 14 acres (5.8 ha) and lies immediately west of the peninsula. Schoodic Island is 67 acres (27 ha) and lies 0.75 miles (1.2 km) southeast of the peninsula. Rolling Island is 5 acres and centered off the east side of the peninsula.

Adjacent Lands

The park boundary encompasses only a portion of the Schoodic Peninsula. Lands immediately north of the boundary are largely undeveloped and possess many of the same characteristics as those within the park. Vegetation is similar and the forested upland and coastal resources provide habitat for the same plants and animals observed within the park. While some of the privately owned islands off Schoodic are protected by conservation easements, their level of protection varies and NPS has no jurisdiction over their future use. Maine Shoreland Zoning

and other local and state regulations provide a certain degree of protection, but future use of these lands for incompatible purposes could threaten park resources.

Plants

The park lies in a broad transition zone between southern deciduous and northern coniferous forests. The combination of the climate and varied topography has resulted in rich species diversity at Schoodic. A two-year study of vascular and forest plant species of the Schoodic Peninsula found 343 species, including 75 non-native species (Mittelhauser et al. 1995, Spencer-Famous and Perera 1999). The most abundant vegetative community on the peninsula is the maritime spruce and fir forest. The most common species is red spruce, and associated tree species include primarily balsam fir, paper birch, and white spruce. Some of the more common species in the understory include blueberry, mountain cranberry, mountain ash, starflower, Canada mayflower, bunchberry, and wild raisin. For the most part, the herb and shrub layer in these forests is poorly developed, and it is mosses instead which are abundant in the understory, especially where the microclimate is humid and cool.

The Maine Natural Areas Program (MNAP), which is administered by the Maine Department of Conservation, has identified two "Rare or Exemplary Natural Communities" at the Schoodic District: Jack Pine Woodland and Maritime Shrubland. The Jack Pine Woodland is rare (20–100 occurrences) in Maine because the dominant tree species, jack pine, is at the southeastern limit of its range. A significant stand of jack pine is located on the eastern face of Schoodic Head. The southern half of Little Moose Island contains an exemplary Maritime Shrubland community, which is a shrub-dominated habitat along seaside bluffs exposed to onshore winds and salt spray. The MNAP has also documented five rare plant locations on the southern portion of the Schoodic Peninsula, including two on Little Moose Island.

Animals

The Schoodic District provides habitat for a variety of animals. Common mammals include moose, deer, fox, coyote, bat, beaver, weasel, vole, shrew, squirrel, and hare. Ninety-six species of migrating and breeding birds were

counted in studies conducted on the Schoodic Peninsula between 1995 and 1996, including cormorant, osprey, eider, heron, gull, and many species of small woodland birds. Ponds and wetlands provide habitat for amphibians and reptiles, such as salamanders, frogs, and snakes. The intertidal zone provides critical habitat for as many as 40 species of invertebrates. The Maine Department of Inland Fisheries and Wildlife has identified a number of critical wildlife habitats at Schoodic, which are areas that are essential to the conservation of state endangered or threatened species, including the bald eagle.

CULTURAL RESOURCES

Research and Documentation

Section 110 of the National Historic Preservation Act requires federal land managers, in consultation with State Historic Preservation Officers (SHPO), to establish programs to locate, inventory, and nominate to the National Register of Historic Places all properties that appear to qualify. The U.S. Navy and National Park Service have initiated or completed a number of these studies within the former navy base and NPS lands on the Schoodic Peninsula.

The U.S. Navy completed a Historic and Archaeological Resources Protection Plan in 1996, and a Cultural Resources Survey in 1999. The latter study consisted of an archeological reconnaissance and a survey of buildings and structures on the former navy base at Schoodic Point, as well as at the Winter Harbor and Corea properties. The report found that only two properties—the Rockefeller Building and its associated powerhouse—were eligible for listing in the National Register. In supplemental documentation submitted to the SHPO in 2000, the Navy also recommended that there were no buildings or structures deemed significant in a military history sense, or in Cold War historic context. The SHPO concurred with these findings.

The report identified a historic farmstead that had likely been obliterated by the construction of a baseball field. Overall, the report stated that the potential for archeological resources was low. The SHPO also concurred on this assessment. The Navy then completed a

National Register nomination for the Rockefeller Building and powerhouse, which the SHPO reviewed. The NPS will submit the final nomination to the Keeper of the National Register of Historic Places. In addition, NPS undertook a cultural landscape inventory of the former navy base property in 2000. It recommends that the base (excluding the Rockefeller Building and powerhouse) contains no significant cultural landscape components and is not eligible for listing in the National Register.

Four NPS projects are underway that will document and evaluate many of the cultural resources in the Schoodic District as a whole. An ethnographic overview of Acadia National Park (including the Schoodic District) is being prepared in consultation with the Maine tribes. This effort will document the tribes' historic and present links with the landscape. The information will include traditional cultural places, resource use, and other activities, place names, and significant events. If sacred sites are identified, they will be designated for preservation by NPS and remain confidential. Secondly, a park-wide archeological overview and assessment is being prepared. Based on preliminary archival research, all known and potential sites at the Schoodic District have been recorded and described. All known sites have been located in the field and mapped with a geographic positioning system (GPS). This project will recommend a strategy for completing a comprehensive field survey of the entire Schoodic District. A third project nearing completion is a draft National Register nomination of the Schoodic Peninsula Historic District. This nomination captures historical information on significant landscape features and buildings that date from the late-19th to mid-20th century. The fourth study in progress is a cultural landscape inventory of the Schoodic District, which mirrors the National Register nomination and recommends that the district be considered eligible for the National Register.

A number of ongoing studies to be completed within the next year or two will identify and document many of the cultural resources in the Schoodic District. However, there are research gaps that need to be filled. The following projects are planned for Acadia National Park at Schoodic: a comprehensive archeological field

survey, a historic structure report for Rockefeller Building and powerhouse, and a cultural landscape report for the Schoodic District. The NPS will also develop other relevant historical contexts, such as American Indian (Wabanaki) use and early Euro-American settlement, to evaluate archeological resources in particular.

Archeological Resources

Although a comprehensive survey of archeological resources on the Schoodic Peninsula is yet to be completed, evidence of human occupation of areas of Maine and the rest of New England is known to date from as far back as 11,500 years ago when ice began to withdraw from the Gulf of Maine region. Coastal groups living 3,000–6,000 years ago were separate from interior groups in what is now Maine.

Archeological sites in the study area are primarily shell middens (i.e., waste piles of shells from clams, oysters, and other shellfish), which indicate American Indians occupied the Schoodic Peninsula at least seasonally to gather shellfish and other marine resources. Although tribes were primarily nomadic and followed food sources, evidence suggests the possibility that some coastal people occupied sites year round, especially in areas accessible by boat (Berger & Assoc., Inc. 1999). Other archeological sites related to 18th- and 19th-century settlements exist in several areas within the Schoodic District.

Early Settlement

Many European explorers in the 16th and 17th centuries reported contact with the American Indians in what is now Maine, and both France and Britain had small colonies in Hancock County and claimed the land as theirs during the 17th century. The economy of the area was based on fishing and lumbering, as the soils were poor for growing grains. By the 19th century, alternative agricultural crops such as cranberries and orchard fruits, along with meat and dairy products were cultivated in the region. By 1860, the seven coastal villages of Gouldsboro-ough (sic), which at the time included Winter Harbor, had roads, but this was not true of the southern reaches of the peninsula where the park is located today.

The first recorded non-American Indian settler in the study area was Thomas Frazer, an African American who established a salt works near the mouth of Frazer Creek by 1790. The same area was later inhabited by a small fishing community of about 50 people. The lower peninsula had no permanent inhabitants until the 19th century when the Arey family built two homes and another family occupied Little Moose Island. By the turn of the 20th century, a house and barn were built near what is today the ball field on the former navy base.

By the early 1890s, in response to demand for summer "cottages" in the area, Maine native and Wall Street financier John G. Moore purchased much of the land that is now inside the park on Schoodic. In preparation for its development, he constructed a scenic road which ran from Frazer Creek south to West Pond Cove and east to Schoodic Head. Moore died before he could begin development of the peninsula, and this—combined with grassroots efforts to conserve Mount Desert Island and later the Schoodic Peninsula—kept the land from development well into the 20th century. His daughters donated the property to the Hancock County Trustees of Reservations.

Park Development

In 1916, conservation efforts resulted in the establishment of Sieur de Monts National Monument on Mount Desert Island, which later expanded to become Acadia National Park. Congressional legislation in 1929 allowed for the acquisition of land for the park in other parts of Hancock County. Within a month of the enactment of the law, the Hancock County Trustees of Reservations donated approximately 2,050 acres to the NPS.

Near the same time as the donations of land at Schoodic, John D. Rockefeller, Jr. was working with the park to help create a park loop road on Mount Desert Island. The road would follow the coastline and

provide access to many scenic vistas. However, a complete park loop road was not possible because of the U.S. Navy's radio communications station at Otter Cliffs. As a result, NPS arranged for the U.S. Navy to move the station to Schoodic and constructed most of the visitor facilities that exist today outside of the former navy base, including a 6-mile Schoodic Loop Road in 1933-1935.

The labor supplied by the Civilian Conservation Corps under the New Deal also completed four hiking trails with trailheads on Schoodic Head. These trails each follow their historic alignment and illustrate the high quality of workmanship and adherence to NPS standards and specifications. The development of a parking area, rest room, and pumphouse at Schoodic Point, the primary destination for most visitors to the Schoodic District, appears much as it did when construction was completed in the 1930s. This is

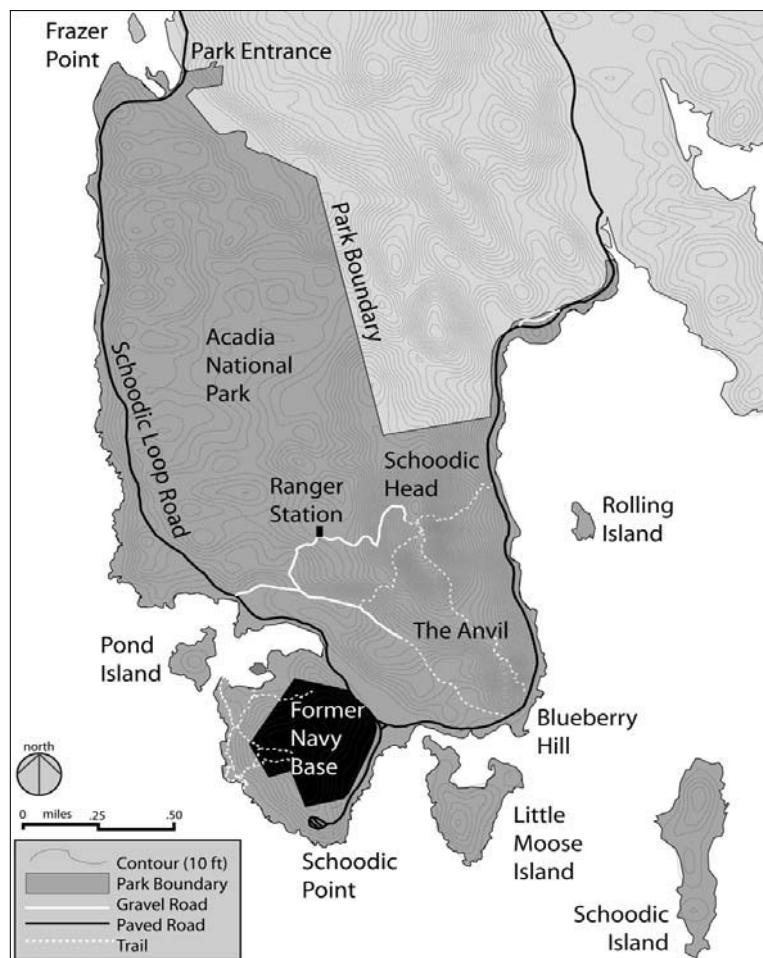


Figure 4. Acadia National Park: Schoodic District

true for a small parking area and entrance road at Blueberry Hill and the summit overlook at Schoodic Head. A second construction phase in the study area took place during the mid-1960s in response to the 50th anniversary of the National Park Service. The Mission 66 program work included a modern bridge over Frazer Creek and a picnic area at Frazer Point.

Navy Base Development

The history of the navy base dates back to the early 20th century. Alessandro Fabbri operated a small amateur radio receiving station at Otter Cliffs on Mount Desert Island and wanted to assist his country during World War I. The U.S. Navy offered Fabbri a commission in exchange for the station and soon found the station to be a critical link in maintaining transatlantic messages during weather conditions where other receiving facilities along the coasts were unable to operate. Over the years, the facility grew into a radio communications station for the U.S. Navy.

Congress authorized an exchange of land between NPS and the U.S. Navy in 1935. In addition to the original transfer of 26 acres, NPS transferred an additional 152 acres to the U.S. Navy in 1947 to allow for the expansion of the base during the Cold War. As part of the arrangement, NPS constructed the initial navy facilities, including the Rockefeller Building, which Grosvenor Atterbury designed in the same style used for the two carriage road gatehouses in the park on Mount Desert Island.

The construction of buildings during the 1940s and 1950s included a multipurpose administration building, barracks, commissary, gatehouse, pumphouse, and communications receiving station. In the early 1960s, the U.S. Navy completed the construction of an antenna array in nearby Corea and relocated all of the operational activities from Schoodic to this new site. At that point, new developments at Schoodic consisted primarily of amenities, such as the ball field, picnic shelter, and gymnasium. In the 1970s, the Schooner Club, a medical clinic, bowling alley, and theater were added. In 1977, the U.S. Navy returned approximately 81 acres of land along the shoreline to NPS. In the past 20 years, additions have primarily been housing related. Schoodic Shores is a housing project completed in 1980, the barracks were expanded

in 1989, and three duplex recreational cabins were added in 1990.

As of 1997, the navy base employed 500 personnel; however, in 2001 the U.S. Navy announced its intent to close the base, which occurred on June 30, 2002. The base closure also involved 23 acres in Winter Harbor containing 80 units of housing and 451 acres in Corea, part of the town of Gouldsboro, where two operations buildings are surrounded by a critical ecological area. These properties will transfer to the towns of Winter Harbor and Gouldsboro and the U.S. Fish and Wildlife Service.

Historic Properties

A proposed Schoodic Peninsula Historic District, including all of the national park lands in the Schoodic District except the 100-acre former navy base property and four coastal islands, is considered eligible for listing in the National Register of Historic Places as a significant cultural landscape. The proposed Schoodic Peninsula Historic District is historically significant because it was conceived and designed as a park and recreation area beginning in the late 19th century. The National Register nomination was prepared by NPS in consultation with the Maine Historic Preservation Office and will be forwarded to the keeper of the National Register.

The Rockefeller Building and powerhouse are the only two buildings located on the former navy base that have been determined eligible for listing in the National Register of Historic Places. They were designed by Grosvenor Atterbury, architect of the distinctive French Norman-style gatehouses on the Park Loop Road on Mount Desert Island. The original landscape surrounding the buildings lacks historic integrity (NPS Cultural Landscape Inventory, 2001).

The buildings are historically significant because they are closely associated with important persons and events concerning the development of Acadia National Park and the establishment of the U.S. Navy radio station. They also embody distinctive characteristics of design and construction that possess high aesthetic qualities. The buildings were nominated to the National Register by the U.S. Navy with the concurrence of the Maine Historic Preservation Office (Letter of 9/20/2000).

PARK FACILITIES

The primary means of access to the Schoodic District is via the Schoodic Loop Road, which is a 6-mile scenic drive that skirts the rugged coastline (Figure 4). The road and scenery have changed little since their initial construction between 1933 and 1935. Beginning at the northwestern boundary of the park at Frazer Creek, the road provides visitors with a classic Maine coast vista of rocky shoreline, islands, and a lighthouse. Frazer Point provides a picnic area with parking, restrooms, interpretive waysides, and a seasonal dock for small recreational boats. The road continues one-way in a counterclockwise direction around the peninsula using a harmonious mix of local materials and was designed to take advantage of the dramatic ocean views. A 1-mile gravel spur road leads to the top of Schoodic Head where a small circular drive provides parking for an overlook and trailhead. A ranger station and several related structures are located off the road to Schoodic Head. A two-way paved spur road leads to Schoodic Point at the southern end of the peninsula. This popular destination offers parking, restrooms, and interpretive waysides. Blueberry Hill is a parking area located just beyond Schoodic Point that provides access to the shoreline and a trailhead.

The park maintains 2.6 miles of hiking trails that emanate from Schoodic Head. The four named trails (i.e., Anvil Trail, Alder Trail, East Trail, and Schoodic Head Trail) offer a variety of hiking opportunities and panoramic views. A network of informal social trails on Little Moose Island poses challenges for resource protection if fragile vegetation is to be protected from trampling. The former navy base occupies a large portion of Big Moose Island, which is actually connected by a wetland to the Schoodic Peninsula (Figure 6). The former navy base contains 46 buildings (212,300 square feet), 350 parking spaces, and other infrastructure that includes offices, housing, recreational facilities, and support and utility systems. The base is heavily forested, with winding roadways opening into large clearings containing buildings and parking areas of varying sizes. The site was developed over 67 years, and the buildings and structures range in date from 1935 to 2001. As a result, the built environment is very heterogeneous, with buildings constructed in varying styles and forms using many

different building materials, including wood, brick, metal, and concrete. Most of the former navy structures are utilitarian, and lack historical reference to Acadia National Park or the early buildings of the station itself.

All buildings on the former navy base are accessible by road and served by ample parking areas. There is no formal pedestrian circulation system and many of the buildings are inaccessible to the handicapped. Pedestrians must share the roads with automobiles, and informal foot trails run through the wooded areas connecting some of the buildings. The U.S. Navy constructed walking trails to provide access from the base to various points along the shoreline of Big Moose Island.

Although much of the former navy base remains heavily wooded, the built areas are a conglomeration of varying building types surrounded by asphalt drives and parking areas, with little or no vegetation. The Rockefeller Building and its generator house are the only structures that show a definite relation to Acadia National Park.

VISITOR EXPERIENCE

The Schoodic District is zoned as a "Natural Area" in the 1992 *General Management Plan* and managed primarily for conservation and resource protection with limited public facilities. In 2000, the Schoodic District of the park experienced approximately 235,000 recreation visits. This is slightly lower than the annual average of 254,000 recreation visits over a 13-year period (1990–2002). A recent study (DOT 2001) predicted visitation to Schoodic would increase slowly, by about 500 per year to average nearly 247,000 in 2005 and nearly 280,000 in 2015.

The University of Vermont completed the Schoodic Peninsula, Acadia National Park, Visitor Study 2000–2001 (Manning et al. 2002) to gather information to assist NPS in developing a new management plan for the Schoodic District of Acadia National Park. The objectives were to collect information on the number and type of visitors and to gain information that will help formulate standards of quality for visitor experiences.

Most visitors stay on the Schoodic Peninsula only one day and spend nearly three hours at a time in the Schoodic District. The most popular locations to visit are Frazer Point, Schoodic Point, and Blueberry Hill. Visitor and automobile counts indicate that peak visitation occurs at the selected count sites between 1:00 p.m. and 4:00 p.m. In the Schoodic District, the primary activities for typical visitors are watching the surf and driving on the scenic loop around the end of the peninsula. Other common activities include photography, observing nature, bicycling, and picnicking. However, visitors stated that taking in the natural scenic beauty was their primary pastime.

The most frequently cited positive qualities of Schoodic are the pristine natural beauty and scenery coupled with the quiet atmosphere and low levels of visitation. People come to Schoodic with the expectation that it will be more peaceful and less crowded than the Mount Desert Island portion of Acadia National Park. Most visitors leave the Schoodic District with their expectations fully met. Those who are not fully satisfied cite overcrowding at Schoodic Point as a problem.

TABLE 1. BASELINE AND PROJECTED USE DATA

Schoodic District—Baseline Data Visitor & Vehicular Use in 2000	3 Peak Months (July/Aug/Sept)	9 Other Months	Total
Average daily recreation visits	1,369	416	653
Annual recreation visits	122,345	112,555	234,900
Average daily recreation vehicles	452	154	229
Annual recreation vehicles	40,782	41,764	82,546
Average daily non-recreation vehicles	350	350	350
Annual non-recreation vehicles	31,446	94,338	125,784
Average daily vehicles	802	504	579
Annual vehicles (all)	72,228	136,102	208,330

Schoodic District Projected Use Data for 2010–15	Alternative A	Alternative B	Alternative C
Total program participants on typical day (staff + students)	20	150	350
Annual program participants	1,800	13,500	31,500
Staff (NPS + partners)	5	30	60
Lodging for participants & staff (single occupancy per bedroom)	22	90	190
Total parking spaces	350	350	350
Projected average day recreation use ¹	718 + 20 = 738	718+150 = 868	718+350 = 1068
Projected peak day recreation use ¹	1,526	1,656	1,858
Projected total recreational use	258,500	272,000	290,000
Projected average daily vehicles (all)	454	519	619
Projected annual vehicles (all) ²	154,592	160,442	169,442

¹ Assumes 3 months at high rate of use; lower rest of the year

² Assumes recreational vehicles increase by 10%; program users arrive 2 per car on average and that non-rec vehicles are reduced by 50% from baseline year

PARK MISSION, PURPOSE, AND SIGNIFICANCE

PARK MISSION

Acadia National Park's mission statement is based on the park's enabling legislation and its *General Management Plan* (1992) which remains in effect.

The National Park Service at Acadia National Park protects and preserves outstanding scenic, natural, scientific, and cultural values for present and future generations through programs, facilities, and services. It also provides programs and opportunities for non-consumptive, resource-based recreation and education for an increasingly urban population (NPS 1992a).

PURPOSE

Acadia National Park has three main purposes. One is to protect and conserve the land and water resources, the scenery, the natural and historic objects, the wildlife, and the undeveloped character of the lands within the legislated park boundary. Another is to promote and regulate the use of the park for the benefit and enjoyment of the public in such manner and by such means as will leave the park resources unimpaired for the enjoyment of future generations. Finally, NPS is directed to protect and preserve the scenic, ecological, historic, archeological, and cultural resources of the Acadian archipelago and to limit development of the islands and preserve their natural qualities and traditional resource-based land uses.

SIGNIFICANCE

A rich combination of cultural and natural features and exceptional scientific, educational, and recreational opportunities contribute to the character and significance of Acadia National Park, the first national park east of the Mississippi and the only national park in New England.

When President Woodrow Wilson set this area aside as a national monument, he cited the

historic interest associated with Samuel de Champlain's 1604 landing on Mount Desert Island. He also cited the great scientific interest of the island's topography, geology, wildlife, and vegetation. Acadia National Park has a variety of significant resources, including its landscape, air and water quality, biological diversity, cultural heritage, historic properties and museum collection. The park's coastal and island landscape is unequaled along the Atlantic shore of the United States. Mountains, lakes, and wooded valleys add character to the land. The park's islands provide nesting sites and critical habitat for a great diversity of plants and animals, including species of state and national significance.

The cultural heritage of the park is equally important and includes resources related to American Indians, French and British settlers, and the wealthy Americans of the late 1800s and early 1900s who established summer colonies, founded the park, and contributed to the creation and development of the conservation movement. The surviving historic features and designed landscapes, such as those of the park's trail system and Schoodic Loop Road, are important because of their history, durability, and uniqueness. They commemorate those who designed and built them.

Acadia National Park also offers scientific research value; the park provides a variety of opportunities to conduct research and monitor resources. There is a multidisciplinary database at the park that serves as the scientific foundation for ecosystem research and monitoring programs. An extensive scientific bibliography dates back to the late 19th century. Today, an expanding geographic information system and ongoing air, water, wildlife, and vegetation monitoring programs demonstrate the park's continuing and important role in scientific endeavors. Acadia National Park offers excellent opportunities for educating visitors about significant and varied resources. Access to an array of sites with scenic, scientific, natural, and historic interest is provided by a network of carefully designed hiking trails, carriage roads, and scenic drives. Visitors participate in numerous recreational activities such as camping, hiking, bicycling, cross-country skiing, horseback and carriage riding, kayaking, canoeing, and sight-seeing. People of all ages are attracted to a

broad spectrum of interpretive activities, including guided walks, amphitheater presentations, environmental education programs, and outreach activities.

Schoodic District

The Schoodic District exemplifies the values and resources described in Acadia National Park's mission and purpose statements. Visitors cherish Schoodic for its peaceful character and outstanding scenic beauty. Schoodic offers visitors exceptional views of the rocky coast and surrounding islands. It is a favored spot for watching high surf and enjoying views to the open ocean from its lightly traveled scenic road that ends at Schoodic Point. The summit of Schoodic Head, which is accessible by gravel road and hiking trails, provides another outstanding scenic overlook.

Studies reveal that most of the Schoodic District (outside of the 100-acre former navy base property) is eligible for listing in the National Register of Historic Places as a historic district based on its significant cultural landscape. The proposed Schoodic Peninsula Historic District is historically significant because it was conceived and designed as a park and recreation area beginning in the late 19th century. Outside of the base, the appearance and visitor experience of the Schoodic District has remained relatively unchanged since 1940, when NPS completed its first period of development (NPS, National Register Nomination for Schoodic Peninsula, 2001).

The Rockefeller Building and powerhouse are the only two buildings located on the former navy base that are eligible for listing in the National Register of Historic Places. The buildings are historically significant because they are closely associated with important persons and events concerning the development of Acadia National Park and establishment of the U.S. Navy radio station. The buildings also embody distinctive characteristics of design and construction that possess high aesthetic qualities.

The Schoodic District contains many areas of critical habitat for a variety of plant and animal species, including five state-listed rare plants, and the federal and state threatened bald eagle. The State of Maine has also designated two "Rare or Exemplary Natural Communities" at

Schoodic: a Jack Pine Woodland on Schoodic Head and a Maritime Shrubland on the southern portion of Little Moose Island. The state has identified extensive habitat within the Schoodic District that is essential or significant for wildlife, including the shorelines of West Pond, East Pond, and Schoodic Point; the Frazer Creek estuary; and Schoodic and Rolling islands. The more remote areas of Schoodic's shoreline contain pristine intertidal zones that are robust with plant and invertebrate species from lack of human disturbance.

The Schoodic District also protects exemplary geologic features, such as sea cliffs, sea stacks, cobble beaches, diabase dikes, and a glacially carved landscape.

SCHOODIC LEGISLATIVE HISTORY

Acadia National Park began with the establishment of Sieur de Monts National Monument by Presidential Proclamation 1339 in 1916 (40 Stat. 1173), which was followed by the redesignation of the national monument as Lafayette National Park in 1919 (45 Stat. 1083). In 1929, legislation (45 Stat. 1083) changed the name to Acadia National Park and established NPS's authority to expand the park through donations of property within Hancock County and certain islands in Knox County. This allowed NPS to accept the donation of more than 2,000 acres on the Schoodic Peninsula as an addition to Acadia National Park.

Acadia's boundary was fixed in 1986 by Public Law 99-420. The law authorizes the Secretary of the Interior to acquire conservation easements on parcels of land adjacent to the park on Schoodic Peninsula, and on the islands of Hancock County, by purchase from a willing seller or by donation. The law sets out criteria for such parcels, which must possess one or more of the following characteristics: (A) important scenic, ecological, historic, archeological, or cultural resources; (B) shorefront property; or (C) largely undeveloped entire islands.

In addition to the enabling legislation for Acadia National Park, several laws have been enacted that are specific to the Schoodic District. In

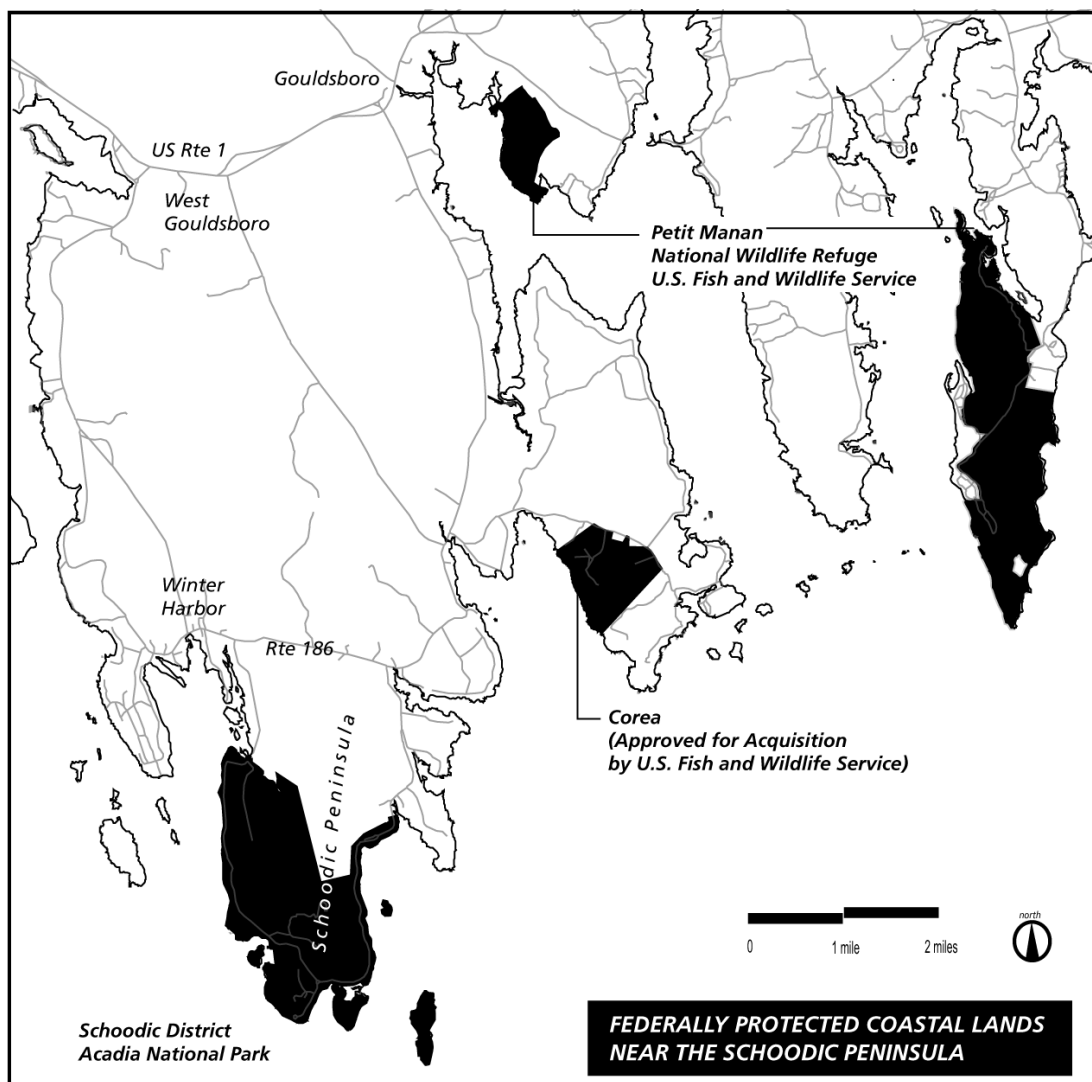


Figure 5. Research and education programs will be enhanced by the presence of several federally protected areas in the Schoodic vicinity.

1935, the first of these laws (49 Stat. 795) provided for the exchange of land between NPS and the U.S. Navy. The act transferred the control and jurisdiction of the original 26-acre site within the Schoodic District to the U.S. Navy for "naval radio purposes." In 1947, legislation (61 Stat. 519) transferred an additional 152 acres to the U.S. Navy with the provision that the land would revert to the park should it become "surplus to the needs of the Department of the Navy." In 1977, the U.S. Navy exercised this provision and transferred 81 acres back to the park. Finally in 2002, Section 2845 of Public Law 107-107 authorized transfer of the original parcel back to the park without consideration, along with personal property associated with the land. The law directed the U.S. Navy to transfer this parcel concurrently with the remaining land it had acquired in 1947. The U.S. Navy transferred

control and jurisdiction of its remaining land within the park (100.1 acres) to NPS on July 1, 2002.

Other legislation related directly to the Schoodic District involves the appropriation and use of funds from the Department of Defense. Public Law 107-117, enacted on January 10, 2002, provided an appropriation of \$4,000,000 to the Department of Defense, Office of Economic Adjustment, for the Naval Security Group Activity Winter Harbor. Public Law 107-206, enacted on August 2, 2002, clarified the intended use of the funding. The legislation directed the Secretary of Defense to obligate the funds made available under P.L. 107-117 for the conversion of the navy base at Schoodic to a research and education center for Acadia National Park. This includes the preparation of

a plan to reuse the navy base for purposes that will benefit the local communities and visitors to the park, and stimulate important research and educational activities. Additional clarification was needed to provide a portion of the funding directly to the local community for economic readjustment. Public Law 107-248, enacted on October 23, 2002, authorized the Secretary of Defense to use the funding for community adjustment activities related to the closure of the navy base and the reuse of the base as a research and education center consistent with the purposes of Acadia National Park.

Acadia's *General Management Plan* (1992) provided the first broad management direction for the Schoodic District. The goals for the Schoodic District are to retain opportunities for low-density recreation, and preserve its existing naturalness and solitude. The plan stated that NPS will "preserve the relatively undeveloped quality of the park on the west side of Mount Desert Island and on Schoodic Peninsula and the islands." It also specified that "High density recreation will be supported in specific areas on the east side of Mount Desert Island, but the present character elsewhere on the island, on Schoodic Peninsula, and on the offshore islands will be retained. No new high-density recreation areas will be developed." This plan will amend Acadia's *General Management Plan* to address the reuse of the former navy base and mitigate the potential impacts of its reuse. The intent of this plan is to uphold the goals of the 1992 *General Management Plan* while carrying out the new legislative mandates to establish a research and education center at Schoodic. This plan does not supersede the guidance and policies provided by the park's *Commercial Services Plan* (April 2000), *Water Resources Management Plan* (April 2000), and *Hiking Trails Management Plan* (February 2002) as they may apply to the Schoodic District.

In addition to the property located within the Schoodic District, the former navy base includes 23 acres in the Town of Winter Harbor and 451 acres in the Town of Gouldsboro. Public Law 107-107 authorizes the transfer of these properties to the respective towns. In preparation for the transfer, the Eastern Maine Development Corporation (EMDC) completed a reuse study in 2001, "Reuse Opportunities and Strategies:

Corea Naval Base and Navy Housing in Winter Harbor," to examine the range of opportunities for their economic redevelopment (EMDC 2001). The study addresses the reuse of 80 units of housing in Winter Harbor and two large operation buildings in the village of Corea (Gouldsboro).

In July 2003, the U.S. Navy completed an environmental assessment for the transfer and reuse of these properties based on potential reuses identified in EMDC's study, which resulted in a Finding of No Significant Impact. The Town of Gouldsboro plans to release approximately 400 acres of undeveloped land at the Corea site to the U.S. Fish and Wildlife Service as an addition to the Petit Manan National Wildlife Refuge. Known as Corea Heath, this area is unusually rich in species diversity because it has had hardly any human use for the past 70 years. The NPS has cooperated with the towns, EMDC, and U.S. Fish and Wildlife Service on their reuse plans and will continue to coordinate the reuse of the former navy properties, but the Winter Harbor and Gouldsboro sites are not within the direct purview of this plan (Figure 5).

The action alternatives presented in this plan support the State of Maine's initiative to build a knowledge-based economy and raise per capita income to the national average. As outlined in the State Planning Office strategic plan, "30 and 1000" (Maine State Planning Office 2001), the basis of the initiative is to increase the percentage of Maine's adults with four-year degrees to 30% and increase the amount of research spending to \$1,000 per employee in the state. Both action alternatives include establishing a NPS research learning center that would promote education and advance science at Acadia National Park.

INITIAL ACTIONS

INTERIM USE POLICY

The visitor experience in the Schoodic District has not changed dramatically with the addition of the former navy lands, although more NPS personnel are now assigned to the district to handle increased operational demands. Considerable effort is going into the preparation of background studies of natural and cultural resources, and visitor use and transportation analyses to provide baseline information to assist future decision making. Newly acquired facilities are being used for offices, meetings, education programs, housing, and park operations. Until this plan is adopted, only short-term uses will be allowed on the former navy property in accordance with permitting procedures in effect at Acadia National Park. The NPS received the navy property at Schoodic on July 1, 2002. Acadia National Park is now operating the property as part of the larger Schoodic District, with responsibility for general maintenance, oversight of utility systems, waste disposal, security, fire protection, and public safety.

While most of the Schoodic District is open to public use, the former navy facilities are open only on a limited, case-by-case basis through the issuance of special use permits. Permits are issued in accordance with Acadia National Park regulations.

The U.S. Navy and the State of Maine had responsibility for environmental issues associated with transfer of the base to NPS. The U.S. Navy completed an environmental assessment in preparation of the transfer of land, which NPS verified. As a condition of the transfer, the U.S. Navy addressed cleanup of problem areas such as buildings containing asbestos or lead paint. The U.S. Navy has completed the remediation of a minor PCB contamination near building 45, which was the only remaining contamination identified in the environmental assessment for clean-up. The U.S. Navy has repaired the porch and façade of the Rockefeller Building, which were deteriorating due to water damage.

The public works building is now the Schoodic District office and base of operations. Several buildings are being used for research and edu-

cation programs with lodging for participants in nearby housing units. Former navy buildings not expected to be used immediately have been secured and utilities partially shut off. A minimum level of heat will be maintained to protect against deterioration of buildings expected to be reused.

The NPS will also continue to develop the park's Research Learning Center (i.e., the Schoodic Education and Research Center) by completing a business plan, preparing an economic feasibility study, and researching potential partners.

Other early actions expected to be taken include:

- **Signs:** Update obsolete directional and informational signs; install a new entrance sign for the base and additional signs where needed to minimize conflicts among pedestrians, cyclists, and motor vehicles.
- **Security:** Update communications system to allow for efficient monitoring with small number of personnel. Install gate at base entrance to control vehicular access.
- **Fire Detection and Suppression:** Evaluate sprinklers and fire alarms and modify as necessary to ensure that occupied and unoccupied buildings can be monitored efficiently.
- **Accessibility:** Analyze buildings to develop a list of needed modifications for universal accessibility.
- **Water and Sewage Systems:** Make necessary modifications to operate systems at reduced capacity.
- **Telephone:** Update obsolete equipment and modify system for efficient operation.
- **Transportation:** Test pilot programs to explore the potential for use of shuttles, buses, and water transportation.
- **Interim Storage:** Locations are being identified and prepared to store navy artifacts and documents related to Schoodic, which are being transferred to NPS. Some of this storage may be temporary until permanent use of space is allocated.

- **Design Studies:** Conduct preliminary design studies for education and research facilities and site circulation in accordance with design guidelines.

PLANNING ISSUES

This plan focuses on a broad vision for Schoodic for the next 10–15 years. The planning team consulted with resource experts, visitors, park neighbors, local and state governments, and interested members of the public to identify their concerns and hopes for Schoodic. This consultation pointed up a number of critical issues to be addressed by the plan. Listed below, these issues are organized into four categories corresponding to National Park Service mission goals. This structure is used throughout the plan for ease of reference.

RESOURCE MANAGEMENT

- How will NPS protect Schoodic's critical habitats?
- What are the proposed treatments of the historic Rockefeller Building, powerhouse, and contributing resources of the proposed Schoodic Peninsula Historic District?
- How will cultural landscapes in the Schoodic District be protected and potential conflicts with natural resource goals be resolved?
- How should management zoning in the 1992 plan be modified for Schoodic?
- How should lands adjacent to the park be protected to prevent negative impacts to park resources and values?

VISITOR USE AND INTERPRETATION

- How is the quiet, natural visitor experience best protected?
- What level of visitor services will be provided and where?
- How can the number of motor vehicles in the park be minimized?

- How can circulation systems (i.e., paths, sidewalks, and roads) be improved to avoid conflicts?
- How should the navy base be reconfigured to feel more like a campus for the Schoodic Education and Research Center (SERC), NPS research learning center?

COOPERATIVE EFFORTS AND PARTNERSHIPS

- How will the Schoodic Education and Research Center (SERC) be managed and what will be the NPS role?
- What are the facility needs for SERC programs versus those for general park purposes?
- What responsibilities will NPS undertake relative to fire suppression and emergency response with towns?

OPERATIONAL EFFICIENCY

- What is the best management model to operate new programs at Schoodic and maintain the physical infrastructure?
- How will partners be selected to become part of SERC?
- What facilities, equipment, and staff will be needed for initial and long-term operations?
- How will decisions be made about buildings not needed for SERC or general park purposes?
- What standards and criteria will guide reuse of existing facilities, new facilities, and site changes?
- How will potential revenues be maximized so that they are available to offset operational costs?

MANAGEMENT GOALS

At the start of planning for the Schoodic District, NPS identified several guiding principles. They incorporate Acadia National Park's mission and state that the Schoodic plan will be based on thorough study of the area's natural and cultural resources and the desire to maintain the current quiet, natural visitor experience enjoyed by users. The NPS is committed to an open public process for decision making and to understanding and respecting the concerns of surrounding communities. National Park Service laws and policies limit the range of permissible and appropriate uses at the Schoodic District.

Goals for Schoodic are based on the studies and consultations conducted by NPS as part of the planning process. The goals were identified to focus discussion and analysis of proposed alternative courses of action. They were discussed at public meetings and scoping sessions where preliminary findings were presented and appear to have a great deal of support.

An important source of information were the visitor studies conducted in 2000 and 2001 by a team under the direction of Dr. Robert Manning of the University of Vermont, a recognized expert on park carrying capacity studies. The studies (Manning et al. 2002), which sampled current users, give an excellent picture of who visits Schoodic and why. Users in 2000 came from nearby towns (19%), elsewhere in Maine (16%), other states (62%) and other countries (2%). In general, visitors were extremely pleased with their experience at Schoodic, remarking that it was far less crowded than they expected. The most desirable qualities of the Schoodic District were "pristine beauty/naturalness/scenery" (57%) and "not crowded/quiet" (33%). When asked what they would change about park management, 38% responded that they wouldn't change anything, 19% suggested more information and interpretation, and 13% requested additional facilities such as parking, restaurant, or gift shop. Overall, visitors were quite satisfied with their trip, with 92% rating their experience 8 or higher on a satisfaction scale where a score of 10 was "most satisfied."

When asked specifically about future uses for the navy base, 22% suggested an educational facility such as a museum or nature center, 11% thought the property should be returned to nature, 7% desired a visitor center, 5% a campground, and 4% overnight lodging. A large number of people simply said that it should be returned to Acadia National Park (26%) without specifying how it should be used.

When asked for their reaction to Acadia's *General Management Plan* objective to "retain current use levels and the existing naturalness and solitude of this part of the park," a resounding 95% of those surveyed expressed support for the goal on which the preferred alternative of this plan is based.

Other critical sources of ideas are consultations with residents and local governments of neighboring communities, meetings with tribal representatives, and members of the general public. The goals were developed after consultation with many people who attended public meetings, read park newsletters, and followed press accounts of the planning process. Public meetings were held in July 2001 and June 2002 to identify issues so that the planning team could develop this draft plan.

Acadia National Park is fortunate to be part of a strong network of organizations and individuals dedicated to protecting the natural and cultural resources so integral to the quality of life in Downeast Maine. The goals and proposals in this plan were prepared in consultation with our many partners, which include educational institutions like the University of Maine and College of the Atlantic, research organizations, and museums as well as advocacy groups like the Friends of Acadia, and the National Parks Conservation Association.

The following management goals set the overall direction for management of NPS lands in the Schoodic District.

RESOURCE MANAGEMENT

- Schoodic District's natural, cultural, and scenic resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystems and cultural context.

- Design guidelines are used to ensure that changes to the landscape or structures are appropriate to the zone in which they are located.

VISITOR USE AND INTERPRETATION

- The quiet, natural visitor experience of the Schoodic District, offering opportunities for low-density recreation and solitude, is maintained.
- Visitors have a safe and enjoyable visit.
- Educational and interpretive programs are offered.
- Research opportunities consistent with the park mission are supported and encouraged.
- The former navy base is adapted as a campus for the Schoodic Education and Research Center (SERC), the Acadia National Park research learning center.
- Recreational and other uses do not impair natural or cultural resources or the visitor experience.

COOPERATIVE EFFORTS AND PARTNERSHIPS

- Acadia National Park maintains and establishes partnerships to develop research and education programs and to foster stewardship of park resources and values both within and beyond park boundaries.
- Acadia National Park consults with neighboring communities on matters of mutual concern.
- Commercial services (e.g., for-profit retail, restaurant, and lodging) are not offered within the Schoodic District as these are more appropriately sited in nearby town centers.

OPERATIONAL EFFICIENCY

- Existing buildings are retained if they can be reused in ways that are operationally effi-

cient, environmentally and economically sustainable, and supportive of the mission of Acadia National Park and the Schoodic Education and Research Center.

- The Schoodic District has adequate personnel and equipment to fulfill operational responsibilities.

ENVIRONMENTAL ISSUES

Environmental issues are potential problems that might occur for various resources if any one of the alternatives is implemented. Each of the issues described below has a corresponding analysis in Part Four, the discussion of impacts. Environmental issues are developed with NPS staff and the public.

Issues Associated with Air Quality

- Changes in the number of people or the distribution of visitors to the Schoodic Education and Research Center may result in differences in the concentrations of air pollutants associated with automobile or bus traffic. These include nitrous oxide, hydrocarbons, carbon monoxide, and carbon dioxide, some of which are precursors to ozone and/or contribute to changes in visibility and acid precipitation.
- Building removal and construction work on existing buildings may require grading, digging, or other actions that could cause temporary dust or larger particulates.
- The base operated several generators for which it had air quality permits. Continued operation of these generators would result in emissions associated with diesel engines, including those listed above.
- Radon, a human carcinogen, is naturally occurring in the granite bedrock underlying the peninsula. Indoor air may need to be tested and mitigation measures installed in buildings occupied by park staff, students, visitors, or lessees to prevent exposure to unsafe levels.
- Asbestos, also a known human carcinogen when inhaled, is present in the building

materials used to construct some of the buildings on the base.

Issues Associated with Water Resources

- Reuse of the navy base could result in changes in the demand for water or in the amount of wastewater treated and discharged by the park; continued effluent discharge from wastewater treatment plan at the former navy base into Arey Cove may create long-term water quality problems and impact the intertidal zone of the cove.
- Increased exploration of the base and peninsula by students and visitors could result in damage to the hydrologic characteristics, water quality, or riparian vegetation of ephemeral or perennial streams or watersheds.
- Activities associated with building removal could result in damage to streams or riparian areas.

Issues Associated with Soils

- Activities associated with the reuse of the navy base could result in the removal, compaction, or other changes to soils in previously undisturbed areas.
- Reuse of the navy base creates the potential for soil contamination through spills, leaking of gasoline or fuel oil, and other unintended releases.
- Development and other human activities are limited by thin soils in the region.

Issues Associated with Vegetation

- Activities associated with the removal and reuse of the buildings could adversely affect wetland values.
- Vegetation may be removed, thinned, or replaced with landscaping to create a more campus-like feel at the former navy base.
- Removal of some of the existing buildings in the study area, and in particular on the base, could create suitable conditions for regrowth of vegetation.
- Increased exploration by students or visitors of fragile or rare vegetative communities,

such as riparian areas, unusual woodlands, or habitat of rare plants, could result in impacts to soils, hydrology, or the plants themselves from trampling, collecting specimens, sliding soils, etc.

Issues Associated with Coastal Resources

- Increased exploration of the shoreline by visitors could result in human-related impacts to intertidal plants and animals.

Issues Associated with Wildlife

- Frequency and duration of disturbance by visitors could impact wildlife in habitat that is now experiencing little or no human presence.
- Visitors could trample vegetation or otherwise degrade habitat for wildlife.
- Research on wildlife may disturb or displace species and degrade habitat during exploration.
- Noise associated with construction may disturb and temporarily displace wildlife within hearing distance.
- Removal of some unused buildings at the base and restoration of habitat may result in the reoccupation of these areas by wildlife.

Issues Associated with Cultural Resources

- Grading, digging, or other construction and building removal activities may unearth or disturb archeological or historic resources.
- Any actions that involve resources that are eligible for the National Register of Historic Places are subject to review to ensure that potential adverse effects are avoided, minimized, or mitigated.
- A thorough archeological survey of the Schoodic District has not been completed; therefore, NPS lacks knowledge on possible locations and conditions of archeological resources, which is necessary to protect them.

Issues Associated with the Visitor Experience

- Reuse of the navy base may increase visitation to the Schoodic District and impact the quiet, natural visitor experience.

Issues Associated with Socioeconomic Environment

- A large percentage of workers at the Naval Security Group Activity Winter Harbor were local civilians who may be looking for new employment opportunities in the area. Some of the employment lost due to the naval base closing may be replaced by employment opportunities related to the proposed reuse alternatives. New jobs would likely be in the service sector, and the education and research sectors, serving visitors at the former navy base, an undetermined number of which could be available to Hancock County residents and others in the region.
- The alternatives at Schoodic could generate spinoff impacts in the local community in addition to direct employment.
- There would be cumulative economic impacts to the area with the reuse of the navy housing in Winter Harbor and operations site in Corea. Some impacts might represent economic losses, while others might be long-term gains.

MANDATORY IMPACT TOPICS

The National Environmental Policy Act requires that agencies consider several different possible issues to determine whether they require detailed analysis as impact topics. The following is a discussion of the mandatory impact topics NPS considered initially, but did not analyze further, either because they were irrelevant to the alternatives, would have negligible impacts, or required no more detailed work to understand impacts.

Conformity with Local Land Use Plans

The existing and proposed land uses of the Schoodic District of Acadia National Park are in conformance with local land use plans. In addition, no conflict is expected with existing state or Tribal planning efforts. No conflict with these plans is expected as a result of the implementation of the draft plan or any of the analyzed alternatives.

Prime and Unique Agricultural Lands

No unique agricultural soils are believed to exist within the Schoodic District of Acadia National Park. While some alternative agricultural crops (cranberries, orchard fruits) were cultivated in the 19th century, soils are believed to be relatively poor for traditional agriculture. In fact, agricultural use of the parklands on Schoodic has not existed for decades. No such soils are expected to be impacted by the implementation of the plan or any of the proposed alternatives.

Energy, Natural or Depletable Resource Requirements, and Conservation Potential

None of analyzed alternatives would result in the extraction of resources from Schoodic parklands. Under all alternatives, conservation principles would be applied to ensure the park's natural resources are maintained. All alternatives include the use of fewer base structures, equating to reduced energy needs than when the Navy occupied the base. Alternatives B and C also include energy audits of base structures, as well as modifications to maximize energy efficiency according to Design Guidelines for Schoodic Education Research Center (see Appendix E). Only those buildings deemed operationally efficient and environmentally and economically sustainable will be reused. Where possible, NPS will convert electric heat to a more sustainable energy source. Fuel used in vehicles is also reduced under all alternatives when compared with that used during navy base operations. Under certain proposals, ground water recharge will be improved as a result of asphalt and structure removal at the base.

Environmental Justice

All federal agencies are required to incorporate environmental justice into their missions by identifying/addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations (Executive Order 12898). In compliance with the order, the plan and all analyzed proposals were assessed during the planning process and it was determined that none would result in significant direct or indirect adverse effects on any minority or low-income populations or communities.

Sacred Sites and Indian Trusts

No known sacred sites (Executive Order 13007) or Indian trust resources (ECM95-2) are involved in the plan or proposals. The EIS also included for further analysis several of the impact topics identified by NPS and CEQ as mandatory to consider. These are described above under "Environmental Issues" and listed here:

- Historic and cultural resources and the design of the built environment
- Wetlands and floodplains, especially if development would occur in them
- Endangered or threatened plants and animals and their habitats
- Important scientific, archeological, and other cultural resources, including historic properties listed or eligible for the National Register of Historic Places
- Ecologically critical areas, Wild and Scenic Rivers, or other unique natural resources
- Public health and safety

ALTERNATIVES ELIMINATED FROM FURTHER STUDY

While developing the alternatives, several possible approaches were considered but not finally analyzed, as they were considered impractical and not able to meet the goals identified for Schoodic. Other approaches were eliminated because they were inconsistent with the park's enabling legislation.

One possibility was for the Navy Morale, Welfare, and Recreation (MWR), which until 2002 operated facilities at the base, to convert the property into an independent MWR destination for active-duty and retired military personnel. This option was evaluated by MWR and rejected for reasons of financial feasibility. Costs for adding and maintaining amenities far exceeded projected revenues. It was recognized that the visitor season in this part of Maine is short, and that significant investment would be needed to convert facilities to civilian use. This further discouraged pursuit of options involving major enhancements associated more with a destination resort than with a national park.

Survey results and public comment further discouraged consideration of commercial lodging, dining, or recreational facilities. It was clearly stated in public meetings and in surveys, that people did not wish to see the property turned into a resort, or used for recreational activities that might generate excessive noise and traffic.

Furthermore, this alternative would be inconsistent with NPS Management Policies, which state that the concession operations must be necessary and appropriate.

Another alternative considered but not analyzed in great detail, was to restore the property back to its appearance in 1935 when the U.S. Navy first opened the radio station at Schoodic. This was eliminated from further analysis because it would have required the removal of many sound buildings with productive lives remaining. This alternative would have been nearly as expensive as the alternatives proposed, but would not have provided adequate space to support the research learning center.

Only a few people suggested, in surveys and at public meetings, considering "restoring the base back to nature" or to its condition before the navy base was built, but the public overwhelmingly opposed this alternative. While this was examined, it presented a host of problems. First, NPS could not have responsibly demolished the National Register-eligible Rockefeller Building complex. Nor could NPS recommend demolition of the buildings and infrastructure necessary to operate the research learning center, such as the maintenance facility, firehouse, water system, and roads. Finally, restoring the property back to its pre-navy base condition would have been contrary to congressional legislation and intent.